# IMNature

## **Big Thanks to the 2015 IMN Gathering Planning Committee**

The 2015 IMN Gathering had excellent tours, speakers, food and networking. The Muscatatuck Wildlife Society, the friends group of the Refuge, hosted the event and did not overlook anything. From keeping everything on time to cleaning real



plates, cups and silverware after every meal to always smiling when answering questions, it was a great experience.

Here are some highlights.

Those that attended the Muscatatuck NWR tour were treated to a beautiful day. Park ranger Donna Stanely

The

(photo left of Donna, photo by Natalie Haley) took the attendees to areas not normally opened to the public. Her knowledge of the property and wildlife was amazing. Many different species of waterfowl were spotted.

Many IMNs own the book *The Life Cycles of Butterflies* by Judy Burris and Wayne Richards (pictured right). The authors presented the Friday

evening program. The brother and sister combo shared their experiences in attracting and photographing insects. Did you know that lighting bug larvae are carnivo-



rous? When describing the size of a butterfly egg, say it is the size of the zero on a penny. These are just some tidbits they shared with the audience. Saturday morning was slightly foggy for the bird hike. Though a little challenging for the birders, it did provide beautiful scenes as Joni James captured in photo left. *Continued to page 2...* 



# Fall 2015

The newsletter for IMN hosts and for Hoosiers who have completed coursework and volunteer service to be certified as an Indiana Master Naturalist.

#### Inside:

Highlights from 2015 IMN Gathering

Shiitaki Mushrooms

State Butterfly
Bat Twins

#### 2015 IMN Gathering continued...

The herps and fish presentations followed and were outstanding. Dr. Meretsky kept us intrigued with all her stories about research done on amphibians. Then came the History of Ichthyology in Indiana presentation. To be honest many of the IMNs were a little worried about this program. Thoughts going in were "how interesting will a program be on fish " and "I am not really into fish so two hours on fish may be too much...". Well, all that changed during Dr. Thomas Paul Simon's presentation. He had us laughing and on the edge of our seats the whole time. He shared many personal stories, his experience with studying fish and how Indiana is the birth place for Ichthyology. Who knew fish history was so exciting and that Indiana played such a huge part in the study of fish! Great job Dr. Simon! (photo right of Dr. Simon by Jody Heaston)



Next were hikes to explore the refuge followed by some supper and social time.

Hardy Lake Raptor Center gave us a wonderful evening program on owls and hawks. It is always amazing to see these powerful birds up close and personal. Hardy Lake Naturalist Leslie Grow reminded us how important it is to support Raptor Centers. Is there one near you? Have you volunteered? Peregrine falcon pictured right by Micheall Reed.

On Sunday, nearly 30 people attended the tour of Big Oaks National Wildlife Refuge. It consists of 50,000 acres and lies in parts of three counties, Jefferson, Jennings, and Rip-

ley. It also overlays a portion of the former Jefferson Proving Ground. Talk about getting to go places people are not normally allowed! The manager opened many gates as we caravanned through the property. The tour lead us to the Historic Hunting Lodge where a light lunch was provided by the Big Oaks Conservation Society, the friends group of the Refuge.

The entire Gathering was excellent and well received by all who attended.



For more info about Gathering:

Muscatatuck NWR http://www.fws.gov/refuge/muscatatuck/

Big Oaks NWR http://www.fws.gov/refuge/Big\_Oaks/

Hardy Lake http://friendsofhardylake.org/development/

Judy Burris and Wayne Richards http://www.butterflynature.com/

IMN 2015 attendees, photo by Patty Fowler

# Shiitaki Mushroom Propagation Project Submitted by Susan Morris, IMN

On May 13, 2015, the Sullivan County Indiana Master Naturalists sponsored by the Sullivan County SWCD conducted a Shiitaki Mushroom propagation project. Eighteen participants hosted by Mike and Darla Harmon inoculated 50 four foot long logs by drilling 5/16 inch holes one inch deep and then placed mushroom "plug spawn" into the holes. The participants formed an assembly line and the logs were then painted with a wax seal to protect the inoculum from adverse weather, disease and insects. Mark Hildebran, a well know local county resident, offered his expertise on Shiitaki mushroom production and on further protecting the logs during the "waiting period". Mark advised keeping a coffee can near the logs in order to determine weekly rainfall, so you can prevent them from drying out. He also advised that covering the logs with chicken wire would help prevent birds from pecking at the plugs and therefore harming the crop.

Mark also referred the group to "Field & Forests Products" catalog which details exactly which logs to use,



Larry Watson, IMN host, on left with stack of inoculated logs

when and how to inoculate, what type of wax to use, and how to store the logs after inoculation. According to Field & Forest, plug spawn in particular is expected to fruit the following year after inoculation. Rainfall and/or temperature change can naturally induce fruiting, or you can force fruit by soaking logs in cold water (at least 20 degrees colder than air temperature) for 12-24 hours, then stacking them in a more upright fash-

ion that allows room for the mushrooms to form and easy access for picking.

"Pinning" should occur in 3-5 days and harvest should occur within 7-12 days of soaking. After fruiting, the logs should be placed back into incubation stacking for winter storage, especially in cold weather climates.

There is much information available on the internet for those interested in pursuing the cultivation of Shiitaki as a hobby or even on a commercial basis. According to "Rodale's Organic Life" website,

"Shiitake mushrooms have long been used medicinally in Asia. Some studies have found the fungi to hold antitumor properties. But many shiitake mushrooms you'll find at the supermarket are grown in saw-

dust, not on logs, leaving them with fewer nutrients. And shiitakes grown in the sun can have



Placing melted wax over the plugs for protection

much higher doses of vitamin D. While log-grown shiitakes go for up to \$40 a pound in Japan, you can enjoy their superior flavor and increase your nutrient intake by growing your own at home."

Next spring, the Sullivan County IMN team hopes to report back with the results of their project. We have attached some photos that were taken of the process. In all, the group enjoyed learning about the process of mushroom production and we look forward to tasting some of the delicious fruits of our labors!

# **State Butterfly**

Submitted by Cheryl Bell, Advanced IMN

Tom Bell, Advanced IMN, wrote a proposal to adopt the Monarch as the Indiana State Butterfly. The Monarch is a symbol for the national movement to save our pollinators by preserving their habitat and the native plants that are vital to their survival. The Garden Club of Marion sent the proposal to Representative Kevin Mahan of Indiana's District 31. In a recent radio interview, Mr. Mahan reported that he will be introducing the proposal as a bill for the Indiana State Legislature to vote on. We are encouraging all of our fellow IMNs, garden clubs, and nature-loving friends to contact their local Indiana Representative asking that they support the bill when it is brought to the Indiana Legislature.

August 17, 2015

#### Proposal

#### THE CASE FOR THE MONARCH BUTTERFLY

The Garden Club of Marion wishes to respectfully petition the legislature of the State of Indiana to adopt the Monarch Butterfly (Danaus plexippus) as the official State Butterfly of Indiana.

The Monarch Butterfly has an orange and black pattern with a wing span of  $3\frac{1}{2}$ -4 inches. It is a milkweed butterfly. Milkweed is the only plant that Monarch caterpillars can eat. Without milkweed, there would be no Monarchs.

Monarchs are unique for their migration. The migration is a four generation cycle. Adults of the first 3 generations live from 2-6 weeks. They follow the growth of milkweed, each generation moving farther north. The fourth generation lives up to 9 months and travels south, as much as 2000 miles, to Mexico, where they spend the winter.

Monarchs arrive in Indiana in May, and leave in late September. They are the most recognizable and popular butterflies in the United States, and perhaps the world.

Monarch numbers have been in decline in recent years. A contributing factor to the decline is loss of milkweed. To help offset the loss, The Garden Club of Marion encourages the planting of milkweed in private and public gardens. Several types of milkweed are native to Indiana, including Swamp Milkweed (Asclepias incarnata) and Butterfly Weed (Asclepias tuberosa). These varieties have very attractive flowers and are extremely aromatic. They make wonderful additions to any garden. Milkweed has become popular in Marion.

Another way to increase Monarch numbers is to raise their eggs and caterpillars at home. An egg in nature has a 5% chance of reaching adulthood. This is due to predation and disease. Raised by hand, the survival rate is 95%.

The Butterfly Garden of Matter Park has nearly 100 milkweeds planted in a formal setting. This is unusual for native plants. Although this is the first year for the garden, it has already produced 200-300 eggs and caterpillars. A group of club members who call themselves "The Monarch Mamas" are currently nurturing the future butterflies in their homes. Between the Butterfly Garden of Matter Park and their own private gardens, they have collected over 1000 eggs and caterpillars.

In nature, only 50 of those 1000 could be expected to reach maturity. In the care of the Monarch Mamas, that number becomes 950. They are hoping to release 1000 Monarch butterflies this year.

The Garden Club of Indiana, Inc., with over 70 local chapters, also encourages the planting of milkweed, and the raising of caterpillars.

County and State Parks have planted butterfly gardens with lots of milkweed. Educational programs at these parks are provided to inform the public about the connection between Monarchs and milkweed. They also have classes to teach young and old how to raise Monarchs at home. These classes are very popular.

Grade schools regularly raise Monarchs as class projects. Butterfly gardens are being planted at schools, nursing homes, and hospitals.

\*\*Continued on page 5....

Monarch continued...

The Monarch has never been more popular in Indiana than it is today. Hoosiers have never been more aware of them.

The butterfly is a universal symbol of transformation. Indiana's entire history has been a story of transformation. In 1816, when Indiana became a State, the wilderness was being turned into farm land. In 1916, our centennial year, Indiana was becoming a modern industrial state. In 2016, our bicentennial year, Indiana is again a State in transformation.

Because of its remarkably perilous migration, the Monarch is a symbol of heroism and strong will. Memorial services for 9/11 included the release of Monarch butterflies.

Butterflies are pollinators. Every farmer knows the importance of pollination. Many farmers provide for butterflies in their gardens. This is especially true with the Amish. When a butterfly garden is planted, it attracts all types of pollinators, including native bees and hummingbirds.

Twenty nine states have an official State Butterfly, or have a butterfly as the State Insect. In 7 states, that butterfly is the Monarch. Only 3 states have neither a State Butterfly, nor a State Insect. Indiana is one of them. The Garden Club of Marion believes that this is a missed opportunity.

This oversight is not in keeping with Indiana's attention to nature. Today, Indiana has more than twice as many acres of forest than we did 100 years ago. There are more white-tail deer in the state than there was 200 years ago. The proliferation of bald eagles in Indiana is an amazing success story.

Our state parks and recreational areas are among the best in the country. City parks and gardens are centers of great municipal pride. Marion's Gardens of Matter Park is an outstanding example.

Although the City of Marion is also in a time of difficult transformation, the vision to expand the Gardens of Matter Park showed great courage and will. The Garden Club of Marion is most grateful for the efforts of Mayor Wayne Seybold, and the City of Marion Parks Department. The Butterfly Garden of Matter Park exists only because of that vision, and those efforts. We are confident that the future of the Monarch Butterfly will be another amazing success story.

It is for these reasons that The Garden Club of Marion respectfully petitions the Indiana State Legislature to adopt the Monarch Butterfly (Danaus plexipuss) as the official State Butterfly of Indiana.

The Garden Club of Marion also respectfully petitions the Marion City Government to adopt the Monarch Butterfly (Danaus plexippus) as the official butterfly of the City of Marion, Indiana.

Submitted by: Thomas Bell, Member of The Garden Club of Marion



Left: Laken Heaston, daughter of IMN coordinator Jody Heaston, enjoys raising and releasing monarchs. Here one decided to test out her wings on Laken's head before flying away. Educating the youth about pollinators is very important.

Right: Cartoon from Facebook just for fun!



# **Bat Rescue, Bella and Bobby**

Submitted by Erminia Wamsley, Advanced IMN

My daughter and her family bought an old house and moved into it late April. I went over one evening last spring to identify a plant for her. On the east side of her house lying in the grass was a dead bat. Dylan, my grandson and Jr. Advanced IMN, went to get a shovel to remove it. When we went to scoop it up I realized that it had two babies, pups, attached (photo below). They had continued to nurse even after their mother's fatal 40 ft. fall. The weather that week was very stormy and I just didn't know how long they had lain there on the grass. My heart totally melted and I just felt that we needed to try and help them as their will to live was strong. I called Jody

Heaston DNR Wells County and she gave me the names of two people in the county that did mammal rescue, but neither wanted bats. Finding someone to take a bat was challenging. I then called Robert Walton from Soarin' Hawks at Metea Park and he instructed us what to do for them with no guarantee that they would survive. Dylan carefully placed the bats in a box and found a warm place in the garage for them. He checked on them several times in the evening and into the next morning. They survived the night! I called Mr. Walton again and told him that they were alive and I need help! He told me that he would take them and we could meet up in Fort Wayne. It was around 30 miles and half an hour to meet him to deliver the pups. I looked for the car that has SOARIN' HAWKS and BAT RESCUE on the back. He got out of his car and



came over to get the bats. Bare handed he lifted them and their dead mother and placed them very gently into a little felt bag and then into a cage in the back seat of his car. He said he recognized me from his "Going Bats" class at the Purdue Extension office years before which Dylan and I had attended. He then came back over to my car and I introduced him to my daughter Lorelei and her kids Dylan age 12 and Joscelyn age 5. He told us that twin pups were usually male and female and asked if the kids would like to each name them. Dylan named the male Bobby and Joscelyn named the female Bella. Mr. Walton told us that he would bottle feed them until they were strong enough for flight training and then release them if survived. Then he would send me a letter updating me on their progress. He stated that leaving them attached to their dead Mother actually saved their lives because they nursed on her the entire time which did drain her body fluids. It was a very interesting and fulfilling experience for us all especially after receiving the letter and picture that they had survived and were released. He informed us that bats have a homing device that they are born with and they will probably flew back to where my daughter lives even though they were so young when found.

# **Odd-N-Ends**

Saturday, April 2, Limberlost Nature Day, Geneva, IN \$10 for the whole day (lunch on your own) This is an Indiana Bicentennial Event

Join Leisure Getaways who for the first time are coming to Limberlost State Historic Site rather than a state park. All are welcome. Reserve your place. Contact Randy Lehman <a href="mailto:rlehman@indianamuseum.org">rlehman@indianamuseum.org</a> or 260-368-7428

The day includes: a birding field trip and speakers on the Limberlost wetlands, flora and fauna, birds and the new Limberlost birding app and Gene Stratton-Porter. Speakers include: Randy Lehman, Ken Brunswick, Tom Swinford, Alexandra Forsythe, Scott Forsythe, Curt Burnette.

# **Big Thanks!**

Big thanks to everyone who helped out at the Indiana State Park booth at the State Fair. Next year we will be needing even more help as Indiana State Parks celebrate their 100th birthday. If you are interested in helping next year please email Jody Heaston, jheaston@dnr.in.gov.

#### 2016 IMN Gathering at

McCormick's Creek State Park, April 8-9.

Learn about Indiana State Parks' past 100 years, do some caving, get close up to some amphibians and explore the park's wildflowers.

More details to come very soon!

Some 2016 dates to keep in mind. Plan an event or look for an event to help with in your area.

January 5 National Bird Day <a href="http://nationalbirdday.com/">http://nationalbirdday.com/</a>

April 10-16 National Volunteer Week <a href="https://www.pointsoflight.org/signature-events/national-volunteer-week">www.pointsoflight.org/signature-events/national-volunteer-week</a>

April 22 Earth Day <a href="http://www.earthday.org/">http://www.earthday.org/</a>

May 14 International Migratory Bird Day <a href="http://www.birdday.org/">http://www.birdday.org/</a>

June 4 National Trails Day <a href="http://nationaltrailsday.americanhiking.org/">http://nationaltrailsday.americanhiking.org/</a>

September 24 National Public Lands Day www.publiclandsday.org/

### **IMN Workshops**

Traditional IMN workshops have been done over eight weeks with sessions held one evening a week. Fort Harrison State Park in Indianapolis has been trying something different by offering both a one-year and one-week workshops with great success. For the one year workshop, a session is offered the second Thursday evening of the month. IMN students are encourage to complete their IMN volunteer hours over the year. In December, an awards/end of workshop celebration is done. On the other extreme, Fort Harrison SP offers a one week IMN workshop in the summer. Two sessions with a lunch break in-between are done each day. This is designed for teachers and other people who want to get the IMN certification but have limited time. Both workshops have been well received.

The IMN council would like to encourage IMN hosts and sites to offer more workshops like these. If you have more questions contact Jody Heaston, jheaston@dnr.in.gov.



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www.indianamasternaturalist.org

The mission of the Indiana Master Naturalist program is to bring together natural resource professionals with adult learners to foster an understanding of Indiana's plants, water, soils and wildlife, and to promote volunteer service in local communities.

Stay updated on next year's Gathering along with other natural resource items by liking the IMN Facebook page.

Thanks to IMN volunteer Carla Gull, the page is hopping with all kinds of nature and volunteer information. She is doing a wonderful job at administering the site for the program. If you have suggestions for IMN Facebook topics email Jody Heaston, jheaston@dnr.in.gov

Like "Indiana Master Naturalists"